QuesTek INNOVATIONS LLC

Press Release

QuesTek Modeling Key to Accelerated Materials Development

Evanston, IL, January 4, 2002 – Under funding from the DARPA Accelerated Insertion of Materials initiative, QuesTek is working with Pratt & Whitney to utilize its *Materials by Design*® technology to create a novel alloys for aerospace rotor component applications.

Currently, the development of a designer knowledge base, which incorporates design allowables, reliability, manufacturing, reproducibility, and other essential information, is a time-consuming and costly endeavor. Consequently, new material insertion into production hardware is extremely difficult, typically taking 15-20 years (if it is successful at all). Emerging efforts in materials modeling are leading to incremental improvements in specific areas (e.g., materials processing and mechanical behavior). DARPA believes that the time-scale between the development of a new material and its implementation into production can be significantly shortened only through a revolutionary change in materials development methodologies. The goal of the Accelerated Insertion of Materials program is to create and validate new approaches, such as QuesTek's *Materials by Design* technology, for materials development that will accelerate the insertion of materials into production hardware. Critical to this effort will be understanding how to effectively use materials models, how to link them across various length and time scales, and how to couple them with an optimized series of experiments to yield the appropriate information for the designer. Validation of the developed approaches will focus on material systems of interest to the DoD.

QuesTek Innovations is a leader in the emerging field of computational materials design. Using its proprietary *Materials by Design*® technology, QuesTek develops and licenses unique materials designed to enable new products, reduce or eliminate long-term environmental impact, enhance the performance of existing products or reduce the cost of materials processing. QuesTek's clients come from both the public and private sectors and include leading Fortune 50 companies. For more information, visit our website at www.questek.com or contact Dr. Frode Stavehaug, Director of Applications Engineering, at 847.425.8214.